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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,291	07/10/2003	Constantin Hauer	TRW(ASG)6651	2651
26294	7590	06/02/2006	EXAMINER	
TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P. 1300 EAST NINTH STREET, SUITE 1700 CLEVEVLAND, OH 44114			LUONG, VINH	
			ART UNIT	PAPER NUMBER
			3682	

DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/617,291	Applicant(s) HAUER ET AL.	
	Examiner Vinh T. Luong	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3 and 5-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 is/are allowed.
- 6) ☒ Claim(s) 3, 5-7, and 9-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



**Vinh T. Luong**  
**Primary Examiner**

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Attachment</u>                         |

1. The Amendment filed on April 11, 2006 has been entered.
2. The Amendment filed on April 11, 2005 is objected to under 37 CFR 1.52 because it is not presented in a form having sufficient clarity and contrast between the paper and the writing thereon to permit the direct reproduction of readily legible copies in any number by use of photographic, electrostatic, photo-offset, and microfilming processes and electronic capture by use of digital imaging and optical character recognition. For example, the writing on the right margin of each page is not legible when it is reproduced by use of electronic capture (scanning).
3. The drawings were received on April 11, 2006. These drawings are accepted by the Examiner.
4. The disclosure is objected to because of the following informalities: the disclosure contains typographical error, *e.g.*, “the hub region 15” in the replacement paragraph beginning at page 2, line 12, in the specification should have been changed to “the hub region 12.” Appropriate correction is required.
5. Claims 9 and 11 are objected to because of the following informalities: no antecedent basis is seen for the term “said portion” in claims 9 and 11. Appropriate correction is required.
6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459

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(1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 3, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohn et al. (US Patent No. 6,312,012 filed on March 19, 1999).

Regarding claim 3, Bohn teaches a vehicle steering wheel (Figs. 1 and 3) comprising:

a skeleton 1-3, said skeleton 1-3 including a hub 1 and a portion 2 attached to said hub 1 and extending away from said hub 1, said portion 2 sloping upwardly and outwardly away from said hub 1 with respect to a plane (unnumbered. See Attachment) extending across the hub 1 and perpendicular to the axis (Att.) of rotation of the steering wheel;

a first detent element 10, 26 as part of a detent connection for connecting a gas bag module 5 to said skeleton 1-3, and

at least one separate support component 8 engaging said skeleton 1-3 and being indirectly connected to said skeleton 1-3 (Fig. 1), said support component 8 carrying a detent pin 10, 26 as said first detent element 10, 26 which in an assembled state of the steering wheel, engages a second detent element 15, 19 arranged on said gas bag module 5 and complementary to said detent pin 10, 26. *Ibid.* col. 2, lines 46-64.

Bohn teaches the invention substantially as claimed. However, Bohn's support component 8 is indirectly connected to the skeleton 1-3.

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It is common knowledge in the art to rearrange Bohn's support component such that it is directly connected to the skeleton in order to provide a secure fastening between the support and the skeleton. The direct connection between the support component and the skeleton is notoriously well known as evidenced by, *e.g.*, US Patent No. 6,561,059 B1 issued to Drefahl (see support component 32 and skeleton 30) and US Patent No. 6,644,145 B2 issued to Albayrak et al. (see support component 26 and skeleton 20). See also legal precedent regarding rearrangement of parts in MPEP 2144.04.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange Bohn's support component such that it is directly connected to the skeleton in order to provide a secure fastening between the support and the skeleton as taught or suggested by common knowledge in the art.

Regarding claim 10, said portion 2 defines a spoke.

Regarding claim 12, said portion 2 extends above said detent pin 10, 26.

10. Claims 3, 5-7, and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohn et al. (US Patent No. 6,312,012 filed on March 19, 1999) in view of Albayrak et al. (US Patent No. 6,644,145 B2).

Regarding claim 3, Bohn teaches a vehicle steering wheel (Figs. 1 and 3) comprising:

a skeleton 1-3, said skeleton 1-3 including a hub 1 and a portion 2 attached to said hub 1 and extending away from said hub 1, said portion 2 sloping upwardly and outwardly away from said hub 1 with respect to a plane (Att.) extending across the hub 1 and perpendicular to the axis (Att.) of rotation of the steering wheel;

a first detent element 10, 26 as part of a detent connection for connecting a gas bag module 5, 6 to said skeleton 1-3, and

at least one separate support component 8 engaging said skeleton 1-3 and being indirectly connected to said skeleton 1-3 (Fig. 1), said support component 8 carrying a detent pin 10, 26 as said first detent element 10, 26 which in an assembled state of the steering wheel, engages a second detent element 15, 19 arranged on said gas bag module 5, 6 and complementary to said detent pin 10, 26. *Ibid.* col. 2, lines 46-64.

Bohn teaches the invention substantially as claimed. However, Bohn's support component 8 is indirectly connected to the skeleton 1-3.

Albayrak teaches to connect directly the support component 26 to the skeleton 20 in order to provide a secure fastening between the support and the skeleton. *Ibid.* Brief Summary of the Invention.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to directly connect Bohn's support component to the skeleton in order to provide a secure fastening between the support and the skeleton as taught or suggested by Albayrak.

Regarding claim 5, Bohn teaches a vehicle steering wheel comprising:

a skeleton 1-3,

a first detent element 10, 26 as part of a detent connection for connecting a gas bag module 5, 6 to said skeleton 1-3,

at least one separate support component 8 being arranged on said skeleton 1-3, said support component 8 carrying a detent pin 10, 26 as said first detent element 10, 26 which,

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in an assembled state of the steering wheel, engages a second detent element 15, 19 arranged on the gas bag module 5, 6 and complementary to said detent pin 10, 26.

Bohn teaches the invention substantially as claimed. However, Bohn's support component 8 is not embedded into the skeleton 1-3.

Albayrak teaches to embed the support component 26 into the skeleton 20 in order to provide a secure fastening between the support and the skeleton. *Ibid.* Brief Summary of the Invention.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to embed Bohn's support component into the skeleton in order to provide a secure fastening between the support and the skeleton as taught or suggested by Albayrak.

Regarding claim 6, Bohn's skeleton 1-3 has a recess 9 around said detent pin 10, 26.

Regarding claim 7, Bohn's detent pin 10, 26 has no threads as shown in Fig. 3.

Regarding claims 9 and 10, said portion 2 defines a spoke.

Regarding claims 11 and 12, said portion 2 extends above/at said detent pin 10, 26.

Regarding claim 13, Bohn's skeleton 1-3 comprises a hub cup 1 on which said support component 8 is arranged.

Regarding claim 14, Bohn's support component 8 and said detent pin 10, 26 form a prefabricated assembly as seen in Figs. 1-3.

11. Claim 8 is allowed.

12. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

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13. Applicant's arguments filed April 11, 2006 have been fully considered but they are not persuasive.

First, the previous objections to the drawings and specification are withdrawn in view of Applicant's replacement drawings and amendment in the specification.

Second, with respect to the rejection under 35 USC 112, second paragraph, the previous rejection based on this ground is withdrawn in view of Applicant's amendment. However, the change in the dependency of claims 9 and 11 necessitated new ground of rejection under 35 USC 112 as seen above.

Third, the previous rejection of claims 1-4, 7, 9, and 12 under 35 USC 102(e) as being anticipated by Bohn is withdrawn since Applicant's current claim 3 requires the support component being directly connected to the skeleton. However, the amendment necessitated new ground of rejection under 35 USC 103 above. Applicant's arguments with respect to claims 3, 10, and 12 have been considered but are moot in view of the new ground(s) of rejection.


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinh T. Luong whose telephone number is 571-272-7109. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Luong

May 30, 2006



Vinh T. Luong  
Primary Examiner



# ATTACHMENT

